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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,455	07/23/2003	Hang Li	M61.12-0511	2549
	7590 08/17/2007	EXAMINER		
Microsoft Corporation C/O westman Champlin & Kelly Suite 1400 International Centre 900 Second Avenue South Minneapolis, MN 55402			ALBERTALLI, BRIAN LOUIS	
			ART UNIT	PAPER NUMBER
			2626	
			MAIL DATE	DELIVERY MODE
			08/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

•	Application No.	Applicant(s)				
	10/626,455	LI, HANG				
Office Action Summary	Examiner	Art Unit				
	Brian L. Albertalli	2626				
The MAILING DATE of this communication apperiod for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	the mailing date of this communication.  D (35 U.S.C. § 133).				
Status	•					
1) Responsive to communication(s) filed on 01 h	fay 2007.	,				
	s action is non-final.					
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under t	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ⊠ Claim(s) 1-33 and 35 is/are pending in the approach 4a) Of the above claim(s) is/are withdra 5) ⊠ Claim(s) 1-12,24-29 is/are allowed. 6) ⊠ Claim(s) 13-23,30-33 and 35 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examine	er.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Burea * See the attached detailed Office action for a list	is have been received. Is have been received in Application of the second in the secon	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date.						
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  6) Other:						

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#### DETAILED ACTION

### Response to Arguments

- 1. The declaration under 37 CFR 1.132 filed 1 May 2007 is sufficient to overcome the rejection of claims 1-23 based upon Cao et al.
- 2. Applicant's arguments with respect to claims 1-33 and 35 have been considered but are most in view of the new ground(s) of rejection.

# Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 13-23, 30-33, and 35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 13-23, 30-33, and 35 are directed to "a computer-readable medium". However, the term "computer-readable medium" is defined by the specification as including "communication media", which comprises carrier waves, modulated data signals, wireless media, etc. (see page 7, lines 16-30 of specification). Therefore, the claimed "computer-readable media" encompasses *signals encoded with functional descriptive material* and is not statutory. That is, a signal encoded with functional descriptive material is not a process, machine, composition of matter, or manufacture.

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## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 13-15 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kohen et al. (*Estimating Word Translation Probabilities from Unrelated Monolingual Corpora Using the EM Algorithm*).

In regard to claim 13, Kohen et al. disclose a computer-readable medium having computer-executable instructions for performing steps comprising:

receiving a string of words in a source language (candidate noun sequence, page 3, 2<sup>nd</sup> column, Outline section);

transforming the string of words into a transformed representation using an iterative algorithm (translation probabilities for the string of words are generated using the iterative EM algorithm, page 3, 2<sup>nd</sup> column, Estimation of Translation Probabilities section);

using the transformed representation to score strings of words in the target language (the translation probabilities are used to score the translations, page 4, 1<sup>st</sup> column, Application section).

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In regard to claim 14, Kohen et al. disclose selecting a string of words in the target language based on the score (the highest scoring translation is selected as the translation of a string of words, page 4, 1<sup>st</sup> column, Application section).

In regard to claim 15, Kohen et al. disclose identifying pages containing the selected string of words in the target language as relevant to the string of words in the source language (a web search is conducted to identify counts of words in the target language, page 2, 2<sup>nd</sup> column, final paragraph to page 3, 1<sup>st</sup> column, 1<sup>st</sup> full paragraph).

In regard to claim 23, Kohen et al. disclose the iterative algorithm is an expectation-maximization algorithm (EM algorithm, page 3, 2<sup>nd</sup> column, Estimation of Translation Probabilities section).

### Allowable Subject Matter

7. Claims 1-12 and 24-29 are allowed.

The following is an examiner's statement of reasons for allowance:

In regard to claims 1-12, since the Chao reference has been overcome by the declaration filed under 35 U.S.C. 1.132, Koehn et al. is now the closest prior art of record. Claim 1 requires "transforming a representation of context words in a source language into a transformed representation of context words in the target language". Koehn et al. do not disclose or suggest "a representation of context words in a source language" which is transformed. Rather, Koehn et al. base their models upon direct

representations of context words in the target language (see page 3, 1<sup>st</sup> column, 3<sup>rd</sup> full paragraph).

Regarding claims 24-29, the combination of Itoh et al. and Chin et al. does not disclose or suggest "providing two possible translations for a word to at least two clients" so that the two clients can, in effect, vote on a correct translation for the word. While Itoh et al. allows a single user to select a correct translation, the translation is stored in a user specific dictionary. Therefore, there is no motivation to allow additional user's to influence a particular user's personal dictionary.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L. Albertalli whose telephone number is (571) 272-7616. The examiner can normally be reached on Mon - Fri, 8:00 AM - 5:30 PM, every second Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BLA 7/9/07

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